

TWO NEW SPECIES OF AQUATIC BEETLES OF THE GENUS  
*HYDRAENA* FROM CUBA (COLEOPTERA: HYDRAENIDAE)

Paul J. Spangler

Department of Entomology, Smithsonian Institution, Washington D.C.  
20560.

---

*Abstract.*—Two new species of aquatic beetles from Cuba, *Hydraena decui* and *Hydraena perkinsi*, belonging to the family Hydraenidae are described. Illustrations of the distinctive aedeagi of both taxa are provided and comparisons are made with related species.

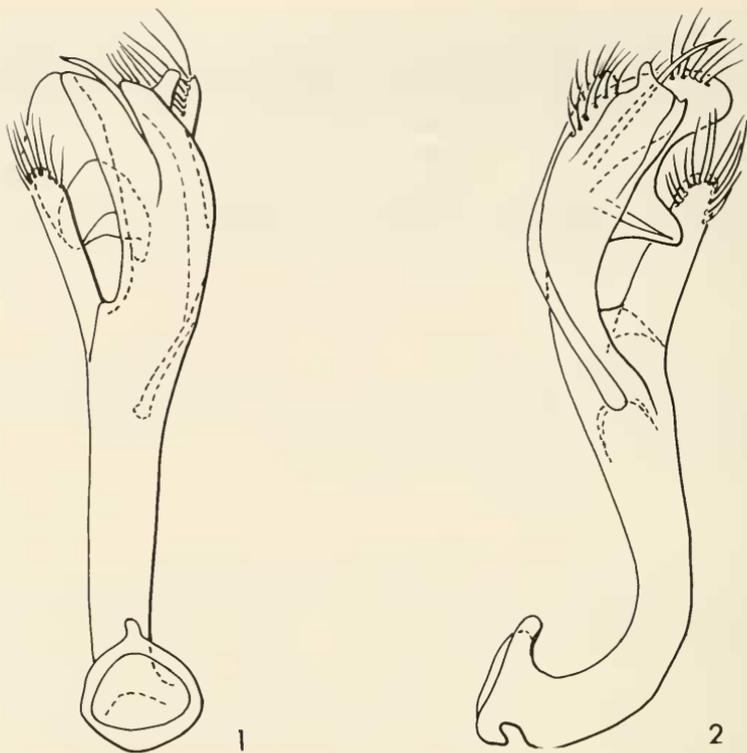
---

The two new hydraenid species described below were formerly included in a manuscript mailed in October 1977 for publication in a report on a Cuban-Romanian biospeleological survey in Cuba. Because of a delay in publication of that report, it is necessary to publish these descriptions separately so the two names can be used in a revision of the family for the Western Hemisphere by Philip D. Perkins. The revision by Perkins (1980) is in press and is scheduled to appear before mid-1980. The new taxa are described below.

*Hydraena decui* Spangler, NEW SPECIES  
Figs. 1, 2

This small species is very similar to *Hydraena longicollis* Sharp and *H. perkinsi*, n. sp. described below. However, *H. decui* may be distinguished easily from both *H. longicollis* and *H. perkinsi* by its much shorter length (1.19 mm vs. 1.44 mm to 1.55 mm), by the light yellowish-brown clypeus contrasting with the dark basal region of the head, by the much more arcuate lateral pronotal margins, by the vague transverse dark band on the pronotum at midlength, and by the differences in the male genitalia.

*Holotype male.*—Narrow elongate; lateral margins of pronotum and elytra strongly arcuate. Length 1.19 mm; greatest width 0.59 mm. Color of head dark reddish brown between eyes on base of head; clypeus, labrum, antennae, and palpi light yellowish brown. Pronotum yellowish brown except for very vague transverse brownish band at midlength; band about  $\frac{1}{3}$  as long as length of pronotum and restricted to disc as a transversely rectangular macula. Elytra yellowish brown. Head with surface shining. Clypeus finely



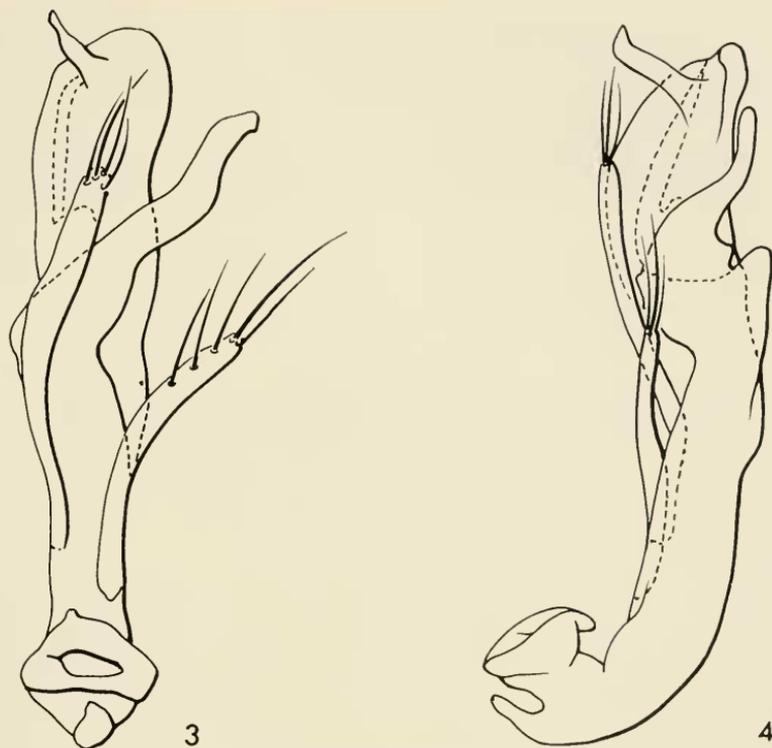
Figs. 1-2. *Hydraena decui*, holotype, aedeagus. 1, Dorsal view. 2, Lateral view.

punctate. Punctures slightly larger behind clypeus, punctures on disc separated by about their diameters. Pronotum with fine punctures separated by  $1-1\frac{1}{2}\times$  their widths; anterolateral regions shallowly, broadly depressed in contrast to the otherwise convex pronotal surface; posterolateral angles distinctly sinuate; anterolateral angles gradually incurved. Elytron with surface shining; punctate; punctures fine, arranged in 15 poorly defined rows; lateral margin explanate; apical angle gradually rounded when viewed dorsally.

Venter reddish brown except hypopleura, epipleura, labrum, and legs yellowish brown. Metasternal plaques tiny, ovoid, shining, and separated by  $3\times$  the greatest width of a plaque. Apical abdominal sterna glabrous and moderately produced.

Male genitalia as illustrated (Figs. 1, 2).

Type-data.—Holotype ♂ and allotype, from CUBA: Oriente Province: Arroyo de la Poa at Sabanilla, 23 Feb. 1973, V. Decu, USNM Type No.



Figs. 3-4. *Hydraena perkinsi*, holotype, aedeagus. 3, Dorsal view. 4, Lateral view.

75663 deposited in the National Museum of Natural History, Smithsonian Institution, Washington, D.C.

Etymology.—This new *Hydraena* is named for V. Decu, the collector of this new species.

*Hydraena perkinsi* Spangler, NEW SPECIES

Figs. 3, 4

This species is very similar to *Hydraena longicollis* Sharp described from Guatemala. However, *H. perkinsi* may be distinguished from *H. longicollis* by the narrower space between the metasternal plaques. In *H. perkinsi* the plaques are separated by twice or slightly less than twice the posterior width of a plaque; whereas, in *H. longicollis* the plaques are separated by three times the posterior width of a plaque. Also, differences in the male genitalia will separate the males of these two species.

Holotype male.—Narrow, elongate; lateral margins of pronotum moderately arcuate; lateral margins of elytra more strongly arcuate than pronotum.

Length 1.55 mm; greatest width 0.80 mm. Color of head black except small brownish area at anterior corner of eyes; labrum reddish brown; antennae and palpi yellowish brown. Pronotum yellowish brown; with a broad transverse dark brown to piceous band at midlength, band about twice as wide as the lighter basal and apical margins. Elytra yellowish brown. Head with surface shining; moderately coarsely, closely punctate, punctures separated by about their diameters or sometimes less. Pronotum with coarse, slightly elongate punctures; punctures separated by 1 or 2 $\times$  their widths; anterolateral regions shallowly, broadly depressed in contrast to the otherwise convex pronotal surface; posterolateral and anterolateral angles about equally incurved. Elytron with surface shining; punctate; punctures moderately coarse, arranged in 15 poorly defined rows; lateral margin explanate; apical angle gradually rounded when viewed dorsally. Venter dark reddish brown to piceous except hypopleura, epipleura, and legs yellowish brown. Metasternal plaques narrow, elongate, shining, separated posteriorly by twice or slightly less than twice the posterior width of a plaque. Apical abdominal sterna glabrous and moderately produced.

Male genitalia as illustrated (Figs. 3, 4).

Type-data.—Holotype  $\delta$  and allotype from: CUBA: Pinar del Rio Province: Quemado de Pineda, in arroyo, 14 Apr. 1973, V. Decu, USNM Type No. 75664 deposited in the National Museum of Natural History, Smithsonian Institution, Washington, D.C. Paratypes: Habana Province: Laguna Ariguanabo, 16 May 1973, V. Decu, 6 adults. Isla de Pinos: Laguna, base of J. A. Mella, 24 Mar. 1973, V. Decu, 1 adult; Represa La Fe, 22 Apr. 1973, V. Decu, 1 adult. Oriente Province: Arroyo de los Berros and Laguna la Cherco Redondo, 19 Mar. 1973, V. Decu, 1 adult; El Cayo, at Baire, 21 Mar. 1973, 1 adult; Mayari Abajo, Loma la Bandera, 29 Mar. 1973, V. Decu, 2 adults; Mayari Arriba, represa, 25 Mar. 1973, V. Decu, 8 adults. Pinar del Rio Province: Laguna Cochinata, 16 May 1973, V. Decu, 4 adults; Laguna Esperanza, 16 Apr. 1973, V. Decu, 1 adult. Paratypes will be deposited in the National Museum of Natural History, Smithsonian Institution, the Royal Institute of Natural History of Belgium, the British Museum (Natural History), the National Museum of Natural History, Paris, the California Academy of Sciences, the Canadian National Collection, and in the collection of V. Decu.

Etymology.—This species is named for Philip D. Perkins whose excellent but as yet unpublished revision of the Hydraenidae of the Western Hemisphere enabled me to recognize this and the preceding species as new taxa.

#### ACKNOWLEDGMENTS

I am indebted to V. Decu from the Institute de Speologie "Emil G. Racovita," Bucharest, Romania to whom I offer my thanks for collecting these and many other aquatic beetles during his fieldwork in Cuba. I also thank

Michael Druckenbrod, Smithsonian staff artist, for preparing the line drawings included here.

#### LITERATURE CITED

- Perkins, P. D. 1980. Aquatic beetles of the family Hydraenidae in the Western Hemisphere: Classification, biogeography and inferred phylogeny (Insecta: Coleoptera). *Quaest. Entomol.* (In press)

---

### 1880-1980 ENTOMOLOGY CENTENNIAL SYMPOSIUM IOWA STATE UNIVERSITY—JUNE 4-5, 1980

A two-day celebration commemorating 100 years of entomology instruction at Iowa State University of Science and Technology in Ames is of special interest to entomologists. Professor Herbert J. Osborn, master teacher and pioneer hemipterist took charge of entomology instruction at ISU in 1880 and developed full-term courses dealing primarily with insects of economic importance.

In addition to the formal program, social periods, luncheons, a banquet, exhibits, tours, and visits are also planned. Distinguished entomology alumni have been invited to speak on the status and future of various aspects of the science of entomology representing seven historically strong areas at Iowa State University.

Alumni, friends, and entomological colleagues are cordially invited to participate in this historic event. Formal invitations and programs will be sent to alumni and former faculty members soon after April 1, 1980.

For additional information contact J. R. DeWitt, Department of Entomology, 102 Insectary, Iowa State University, Ames, Iowa 50011.